Consultative Report on

The Office of Thrift Supervision

Examination of On-Line and Internet Banking Risks

OIG-98-CA-003

SEPTEMBER 30, 1998



Office of Inspector General
United States Department of the Treasury



DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220 September 30, 1998

MEMORANDUM FOR ELLEN S. SEIDMAN, DIRECTOR

OFFICE OF THRIFT SUPERVISION

FROM:

Richard B. Calahan

neral

Birhard B. Colchan

Deputy Inspector General

SUBJECT:

Consultative Report on the Office of Thrift

Supervision Examination of On-Line and

Internet Banking Risks

This memorandum transmits the final report for the Office of Inspector General's (OIG) consulting engagement on the Office of Thrift Supervision (OTS) examination of on-line and Internet banking risks. The engagement resulted from former Director Retsinas' request for the OIG to assist OTS in evaluating examination policies and practices in view of the expected technology changes in the financial services industry. We previously briefed you on our results in San Francisco on May 14, 1998.

The OIG believes the OTS needs to continue preparing the agency to keep pace with the actual and impending cultural changes in banking resulting from rapid customer acceptance of emerging on-line and Internet banking technologies. The OTS examinations have focused on electronic data processing technology and management controls rather than on the unique risks on-line and Internet banking present to thrifts' operations and viability. To examine and supervise in this high speed electronic banking environment, the OTS will need to better measure and monitor its workload, broaden its institutional expertise, refocus its examinations and regularly monitor thrifts' Internet activity. In 1997, the OTS developed training and revised its information technology examination guidelines to prepare examiners for technology changes in the banking environment. According to OTS managers, additional initiatives are underway.

In this report, the OIG offers suggestions for improving OTS' supervisory approach in the changing, high speed electronic banking environment. As you requested at our

Page 2 - Ellen S. Seidman

briefing, the OIG has also provided suggestions as to where on-line and Internet banking coverage could be added to OTS examination procedures.

In late July, OTS managers commented during discussion of the draft report that many initiatives consistent with the OIG's suggestions were already underway. Foremost is for OTS to improve its monitoring of thrifts' Internet Web sites. By doing so, OTS can develop a universe of thrifts transacting on-line and Internet banking, identify the institutional and examination risks, facilitate strategic planning, aid in developing staff expertise and better ensure compliance with Federal disclosure laws and regulations. Finally, the OTS will need to provide its examiners more and better guidance and training in on-line and Internet banking, and refocus its examinations from technology aspects to operational impacts on the traditional bank regulatory rating system used by OTS known as CAMEL.

The consultative report does not contain recommendations requiring an official response in line with Treasury Directive 40-01. Accordingly, written management comments are not required. However, the OIG briefed OTS officials on the results, obtained oral comments to the report conclusions and suggestions, discussed the draft report with OTS managers in late July and incorporated their comments in the report. The OTS officials did not identify any specific material in the report that was sensitive or needed protection under the Freedom of Information Act.

We appreciate the opportunity to assist the OTS in this important electronic banking area. Should you wish to discuss this report, or need additional assistance, you may contact me at (202) 622-1090 or a member of your staff may contact Benny W. Lee at (415) 977-8810 extension 222 in San Francisco.

Attachment

cc: Arthur T. Oliver, Special Assistant to the Director Scott M. Albinson, Special Assistant to the Executive Director, Supervision

TABLE OF CONTENTS

EXEC	UTIVE DIGEST	j
Info Cus Cha	ODUCTIONormation Technology Changing Banking Culturetomers Rapidly Accepting Changes	1 2 2
CONS	ULTING ENGAGEMENT RESULTS	4
Hea	nation Universe is Neededdquarters is Relying on Regions	4
Age Age Ope Safe	ers Need More and Better Training	5 6 8 9
Bett	Monitoring of Web Sites is Needed	11
Matters	for OTS Consideration and Management Comments	14
APPE	NDICES	
1. 2. 3. 4.	Objective, Scope and Methodology. Information on the Internet by West Region Thrifts Information on the Internet by Southeast Region Thrifts Potential Violations of Federal Disclosure Regulations on Web Sites of West Region Thrifts	19 20 22
5. 6.	Major Contributors	

EXECUTIVE DIGEST

Results in Brief

Information technology is rapidly changing the face of banking. Through on-line and Internet banking, thrifts can reach new and distant customers to increase assets and improve operating efficiencies without the high cost of traditional banking. Admittedly still in its infancy, on-line and Internet banking is expected to grow rapidly as technology advances and customer acceptance expands.

The OTS will need to quickly prepare the agency to keep pace with the impending cultural changes. The OTS examinations focused on the electronic data processing technology and management controls rather than on the unique risks on-line and Internet banking present to the thrifts' operations and viability. To examine and supervise in this high speed electronic banking environment, the OTS will need to better measure and monitor its workload, broaden its institutional expertise, refocus its examinations and regularly monitor thrifts' Internet activities.

Objective, Scope and Methodology

This consulting engagement was conducted at OTS' request. The objective was to improve OTS examinations in view of the technological changes in the financial services industry. Fieldwork was conducted in OTS headquarters in Washington, DC and the regional offices in San Francisco, California and Atlanta, Georgia. The OIG discussed with other Federal regulators their plans, efforts and progress in addressing on-line and Internet banking risks in their examinations. The OIG also obtained the perspectives of selected banks and banking associations on the changing banking environment and the Federal regulators' readiness for those changes. Formal agency comments were not requested because this consultative report does not contain recommendations subject to corrective action covered under Treasury Directive 40-01. However, the OIG discussed the results with the OTS Director in May 1998 and obtained oral comments to the draft report with OTS managers in late July.

EXECUTIVE DIGEST

Detailed Results

Banking is **Changing**

The advent of the personal computer and the Internet has and will continue to change the banking industry. Although still in its infancy, on-line and Internet banking offers thrifts the opportunity to greatly increase assets while dramatically reducing operating costs. While privacy and security concerns remain, technology is expected to soon overcome those concerns at which time customer acceptance is expected to increase dramatically. This cultural change will greatly impact OTS examination of the thrift industry.

Changes to OTS Examination Procedures Needed

The OTS will need to quickly prepare for this cultural change. Its examinations of on-line and Internet banking were inconsistent and overly reliant on relatively few specialists. The examiners conducting safety and soundness as well as compliance examinations did not address, nor were they prepared to address, the risks on-line and Internet banking present to a thrift's operation or viability. To adequately examine and supervise thrifts in the changing environment, the OTS will need to better manage its workload, broaden its institutional expertise, focus its examination on the operational risks (e.g., liquidity and credit risks), and monitor the thrifts' Internet activities.

Examination

The OTS has relied on its regional offices to monitor the thrifts' **Universe Is Needed** on-line and Internet banking activities. However, not all regions were doing so and, as a result, the OTS did not have a complete universe of the thrifts engaged in on-line and Internet banking or the services they offered. Establishing and maintaining such a universe would foster examination coverage, as well as facilitate examination planning and identification of staff development needs.

Guidance Needed

More Training and Many of the OTS examiners conducting safety and soundness or compliance examinations were not comfortable with or capable of examining a thrift's on-line or Internet banking activities. In most instances, these examiners collected information from management, passed it on to the information systems examiners and performed little risk assessment or examination procedures over on-line or Internet banking activities. This heavy reliance on a small cadre of specialists will become increasingly difficult

EXECUTIVE DIGEST

and ineffective as more thrifts offer on-line or Internet banking to their customers. Recognizing it needed to broaden its expertise and reduce its reliance on a few specialists, the OTS began in 1997 to develop training and guidance for its safety and soundness examiners. While a step in the right direction, OTS will need to focus on developing staff expertise to examine in the high speed electronic banking environment.

Better Web Site Monitoring Needed

More and better monitoring of thrifts' Web sites would improve compliance with Federal disclosure regulations and laws. Only one of the two regions visited by the OIG was monitoring thrifts' Web sites. In the region not monitoring thrifts' Web sites, two-thirds of those Web sites had potential violations of Federal disclosure regulations and laws. In a recent independent survey, a banking consultant found 86 percent of Web sites with consumer credit products contained violations of Regulation Z (the Truth in Lending Act).

OTS Matters for Consideration

In this report, the OIG presents suggestions and matters which the OTS may wish to consider in improving its examinations of thrifts' on-line and Internet banking activities. Specifically, the OIG believes the OTS should establish and maintain an examination universe of thrifts offering on-line or Internet banking services; broaden the agency's expertise through expanded examiner training, guidance, and opportunities; begin to focus more on the operational risks presented by on-line and Internet banking; and better monitor the thrifts' Web sites for compliance with Federal disclosure regulations and laws.

At the exit briefing, OTS management generally agreed with the suggestions and requested the OIG also suggest where examination areas could be improved to address the concerns relating to the thrifts' on-line and Internet banking activities. Those suggestions have been incorporated into the report. In late July, OTS managers commented during discussion of the draft report that many initiatives consistent with the OIG's suggestions were underway to prepare the agency to keep pace with on-line and Internet banking developments.

Background

Information technology is changing the face of banking. Through on-line and Internet banking, institutions can expand their geographical presence, transact business, increase assets, improve operating efficiencies and enhance customer service and loyalty without adding branches.

On-line banking is a comprehensive term for performing banking transactions through various devices instead of in person. In this report, on-line banking is defined as using a personal computer connected with an institution through a telephone line, while Internet banking is defined as using a personal computer connected with an institution over the Internet.

Information Technology Changing Banking Culture

On-line and Internet banking services allow consumers to bank from almost any location they choose and reach out to institutions in other cities, states, and even countries. A customer can use a personal computer to contact a bank's on-line computers by a direct telephone call or its Internet address (called a Web site). As a result, customers can choose those institutions offering attractive interest rates and services without regard to the institution's proximity to their home or work.

Although on-line banking pre-dates Internet banking, the newer medium offers the greatest growth potential. The reason is that the Internet is an existing and geographically extensive public network which allows easier communication, information exchange, and the sharing of software and data among institutions and consumers. In comparison, on-line banking essentially requires a bank to operate a private network and issue software and updates for all their customers' personal computers.

While only a few thrifts in the two regions the OIG visited offered transactional banking services over the Internet, economics and competition among financial services providers will probably drive many more thrifts to offer Internet banking. A national research firm determined that Internet banking clearly represents a low-cost alternative to branch banking. They estimated an average Internet banking transaction costs only one cent (\$0.01) compared to \$1.07 at a full-service institution.

INTRODUCTION

Potentially, an Internet bank could be 70 percent less expensive to operate than a traditional bank. Furthermore, the costs for an Internet Web site are not prohibitive. The research firm found more than two-thirds of the banks surveyed spent less than \$25,000 to establish their Web site and 84 percent spent less than \$25,000 annually to maintain their site.

Customers Rapidly Accepting Changes

Customer acceptance of Internet banking is expected to increase rapidly. The same national research firm estimated the number of U.S. households using Internet banking would grow from 1.1 million to over 16 million between 1997 and 2000. The firm expects the number of banking Web sites to quadruple between 1997 and 2000.

Several factors support increased consumer demand for Internet banking. Personal computer ownership as well as Internet access and usage are all increasing. Although consumers still have concerns over the security and privacy of banking over the Internet, some bankers believe technology has been developed to address these risks and concerns. They believe Internet banking activity will increase dramatically as consumers become aware of the reduced risk.

Changes Will Impact OTS Examinations

As technology changes the banking industry, it will inevitably change the OTS' examination risks and processes. OTS examiners have generally focused on electronic data processing (EDP) procedures and management's controls over such risks as security, privacy, contingency planning and quality of service. While this focus may be appropriate in the early stages of the online and Internet banking revolution, it will need to change significantly as electronic banking becomes widespread and commonplace.

The OTS will inevitably need to refocus its examination coverage of on-line and Internet banking from technology aspects such as EDP and management controls to operational aspects. OTS managers concurred with this point while discussing the draft of this report, and commented on several initiatives they already had underway which are summarized at the end of this report. Examiners will need to assess management's ability to operate profitably and safely in the high-speed, wide-access on-line and

INTRODUCTION

Internet environment. To do so, the OTS will need to focus more on traditional banking risks resulting from non-traditional banking practices made possible through electronic banking. For example, OTS examiners may need to focus on the risks associated with increased out-of-territory deposit taking and lending and its impact on a thrift's capital, assets, earnings, and liquidity. This will require examiners to examine the thrift management's underwriting, credit administration, investments, asset/liability management, and compliance.

Objective, Scope and Methodology

The overall objective of this consulting engagement was to assist the OTS in improving their examination of on-line and Internet banking. In 1997, OTS Director Nicolas P. Retsinas requested the OIG's assistance in evaluating examination policies and practices in view of the expected technology changes in the financial services industry. OTS management selected on-line and Internet banking out of five areas the OIG identified.

The scope of this engagement focused primarily on identifying the universe of thrifts conducting on-line and Internet banking in two of OTS' five regions, and reviewing OTS coverage of these activities and their risks. The OIG reviewed selected examination reports and work papers to determine the examiners' risk assessment and coverage provided over on-line and Internet banking activities. The OIG also contacted two Internet-based thrifts, a global bank that is a leader in on-line and Internet banking, and three banking associations to determine the industry's perspectives.

The OIG briefed the OTS Director on the results of this consulting engagement in May, 1998. The Director requested the OIG provide suggestions as to where on-line and Internet banking coverage could be added to OTS examination procedures. Accordingly, suggestions are included in this report for safety and soundness and compliance examination procedures. The OIG discussed a draft of this report with OTS managers in late July.

A detailed description of the consulting engagement objectives, scope and methodology is presented in Appendix 1.

If the OTS is to keep pace with the cultural change that on-line and Internet banking represents, it will need to quickly prepare the agency and its examiners. While only a few thrifts in the two regions visited offered transactional Internet banking services, over a fourth of them already had Web sites and the number was growing. Every indication is that this growth will continue. In fact, two of the thrifts offered Internet banking exclusively with little or no traditional banking facilities.

Yet, the OTS examination of on-line and Internet banking was inconsistent and unduly reliant on Information System examiners. Safety and soundness examiners and some of the compliance examiners provided little coverage and had limited technical capacity in these areas.

To adequately supervise the rapidly increasing numbers of thrifts offering Internet banking, the OTS will need to better measure its examination workload and look to the adequacy of its resources and processes to operate effectively in this changing environment. Specifically, the OTS needs to develop a universe of the thrifts offering these services, broaden its expertise in these areas, refocus its examinations onto operational risks, and improve Web site monitoring.

Examination Universe is Needed

The OTS could better determine its examination risks and workload by maintaining a universe of thrifts offering on-line and Internet banking. This universe would also facilitate OTS' annual and strategic examination planning, and help OTS determine staff development needs.

Headquarters is Relying on Regions

The OTS did not know which thrifts were offering on-line or Internet services or what services were being offered. Instead, OTS was relying on its regional offices to monitor and address the thrift's activities. However, neither region visited had identified those thrifts offering on-line banking services, and only one region was monitoring thrifts offering Internet banking services.

In one region, one-third (36) of the thrifts had Web sites. (See Appendix 2.) Yet, the region provided little or no examination coverage over this Internet activity. The other region had been monitoring the Internet activity of its thrifts for about one year. (See Appendix 3.)

As more thrifts establish Internet Web sites and increase services, the OTS' supervisory workload will likely grow. OTS headquarters could better manage this workload by maintaining a universe of thrifts with on-line and Internet banking services. This universe would help OTS managers to determine the risks accompanying on-line and Internet banking, plan annual and strategic examination coverage, identify staff development needs, and foster examination uniformity and consistency.

Year 2000 Project Can Provide Baseline Information

In 1997, the OTS began inventorying each institution's hardware and software systems to determine the institutional threat posed by the Year 2000 problem and management's efforts to address that threat. The OIG believes this project could provide OTS the baseline data needed to establish a universe of the thrifts offering on-line and Internet banking services.

Examiners Need More and Better Training

The OTS needs to broaden its expertise in the on-line and Internet banking areas so that all examiners can assess and address the risks from these operations. As more thrifts establish or expand on-line or Internet banking services, OTS' reliance on a small cadre of highly specialized information systems examiners will become increasingly difficult. Compliance and safety and soundness examiners will have to assume responsibility for examining on-line and Internet banking risks.

Agency's Expertise is Concentrated

Both regions relied heavily on the information systems examiners to identify risks in the thrifts' electronic banking activities. In the examinations reviewed by the OIG, the safety and soundness examiners generally passed the EDP information they collected from the thrifts, including on-line and Internet banking activity, to information systems examiners with little assessment of

institutional or operational risks. In almost every instance, the safety and soundness examiners and their managers stated examination procedures over on-line or Internet services were eliminated because the risk was low compared to other examination risks and priorities. However, the information systems examiners focused on management's EDP controls rather than the safety and soundness operational issues or compliance issues surrounding on-line and Internet banking.

OTS managers fully agreed that reliance on information systems examiners will become increasingly difficult, and stated they are actively recruiting more of these specialists. At the time of the OIG's review the OTS had about 25 of these examiners nationwide. Neither region visited had a large cadre of information systems examiners. One region with 240 thrifts had five information systems examiners, while the other had 108 thrifts and six examiners. These 11 information systems examiners were responsible for examining information systems operations at a total of 73 thrifts and 59 service bureaus, plus increasing amounts of Year 2000 work. Both staffs were unable to complete their scheduled 1997 information systems examinations.

The OTS' expertise in the on-line and Internet banking area is concentrated among four individuals at OTS headquarters and the 25 information systems examiners in OTS' five regional offices. The headquarters staff includes a Special Counsel, a compliance program analyst, a safety and soundness policy analyst and the manager of information systems examinations. They have been working within the OTS and with other regulators to prepare the agency to supervise in the electronic banking era.

Other Federal regulators were facing similar challenges. The regulators contacted by the OIG were concerned with the increasing use of information technology among their institutions and the dramatic growth forecast for electronic banking, especially Internet banking. Like the OTS, they were concerned about their ability to address these changes with their existing resources, and were also just beginning to develop guidelines and training focused on these issues.

Agency's Expertise Needs to be Broadened

While OTS has begun providing its examiners training and guidance in on-line and Internet banking, it will need to do more

to broaden the agency's expertise and ability to supervise thrift activity. The field examiners, especially those performing the agency's core responsibility of safety and soundness, will need considerable training and formal guidance to become familiar with and effectively examine on-line and Internet banking services and risks.

OTS managers acknowledged that most examiners' comfort level is low regarding on-line and Internet banking because these are new and technical areas, and many do not have adequate training, guidance or work experience. Industry and trade associations also generally agreed the OTS field managers and examiners needed more and better training. Some commented that their institutions were training the examiners in electronic banking areas during the examinations.

The OTS stepped up its efforts to expand agency expertise in information technology areas during 1997. In June 1997, OTS alerted thrift Board of Directors and management (as well as examiners) to risks and concerns of retail on-line and Internet personal computer banking. However, it did not provide any guidance to evaluate or control the risks.

In October 1997 the OTS revised its examiners handbook with a new Section 341 containing guidelines for examining a thrift's use of information technology. It replaced a section on electronic data processing controls. The new guidance focuses on the adequacy of an institution's planning, deployment and operation, and audit processes to ensure a safe, sound and secure infrastructure for use of information technology. However, the guidance did not address the unique operational risks resulting from customary banking activities conducted on-line and over the Internet.

In 1997, the OTS developed what is expected to be a national training program to provide safety and soundness examiners with a solid foundation for examining an institution's information technology controls and electronic activities. The pilot session in December 1997 provided examiners with a review of the two OTS guidelines issued in 1997 and some Year 2000 training, but gave limited coverage to home and Internet banking with personal computers. OTS' plans to provide the course agency wide were delayed to mid-1998 because of the Year 2000 project.

Despite this training and guidelines, some examiners may still be reluctant to expand their examination scope into on-line or Internet banking activities. The new guidance still emphasizes technological aspects and management's controls rather than the impact on a thrift's operations and capital position. The guidance often provides examination objectives without recommending specific evaluative procedures. For example, the procedures over Internet banking direct the examiners to review the thrift's Web site, determine the extent and complexity of the thrift's potential Internet activities and search the Internet for any relevant information published about the thrift. Such vague and sweeping guidance could discourage examiners because of the difficulty and time required and result in inconsistent examination coverage.

The OTS' efforts are steps in the right direction. However, if the safety and soundness examiners are to expand their examinations from simply collecting information about on-line and Internet activity from thrift management to evaluating and assessing operational risks, they will need more specific guidance and supervision.

Operational Risks Need to be Addressed

As more consumers engage in Internet banking, the OTS will need to provide examiners with specific guidance and direction to address operational issues and risks.

Examiners will have to address safety and soundness risks as thrifts' Internet banking services evolve from marketing to transaction-based functions. These risks will entail traditional supervisory risks, but also unique risks because of the high-speed and wide service area made possible through the Internet.

 Higher rates on deposits may have to be offered to attract and retain Internet customers. The two Internet-based thrifts contacted by the OIG included this strategy in their marketing plans, while other thrifts offered bonus rates or discounts on fees to customers mentioning special offers on their Web sites. Such higher costs could impact a thrift's earnings if the projected business volumes or lower Internet operating costs are not attained.

- Internet deposits may also be more volatile because customers may chase higher rates and can easily switch their deposits to other institutions. Thus Internet deposits may be vulnerable to depositor flight and impact the thrift's liquidity and asset/liability management.
- Interest rate margin pressures resulting from higher cost, more volatile deposits coupled with out-of-territory lending could result in increased credit risk and impact the thrift's earnings, liquidity and capital position.

The potential risks will vary depending on many factors, including whether thrifts are exclusively on the Internet or Internet services are added as another delivery channel, and the resulting activity, assets and liabilities. However, high cost deposits and interest margin pressures are already operational risk areas in Internet banking. The two Internet-based thrifts contacted by the OIG have consistently reported operating losses since they commenced operations, although one reported its first profitable quarter in July 1998.

Safety and Soundness Examination Procedures Need to be Expanded

Safety and soundness examiners will need specific guidance and direction if they are to refocus their examinations on management's operational expertise within the context of the thrift's electronic banking services and assess the impact of these services on areas traditionally examined. The areas traditionally covered by safety and soundness examiners are known as "CAMELS" - capital, asset quality, management, earnings, liquidity, and sensitivity to market risk.

For example, the OTS Regulatory Handbook on Thrift Activities only mentions on-line or Internet banking or Web sites in the new examination guidelines over information technology (Section 341) issued in October 1997. It contains the vague and sweeping guidance that if an institution has a Web site, examiners should: (1) review the site to determine the extent and complexity of potential Internet activities, and (2) search the Internet for the institution's name to determine if any relevant information was published about the institution.

OTS could enhance its Preliminary Examination Response Kit and Electronic Data Processing Controls Questionnaire by specifically including on-line and Internet banking activity information. In July 1998, OTS managers stated that the preliminary kit was being revised and they thought it would collect the information suggested by the OIG. The OIG believes safety and soundness examiners could obtain the following information and perform the following reviews for each thrift with on-line and Internet banking activity: Web site address, products and services offered, number and types of accounts, deposits, assets, customer locations and concentrations, review of on-line and Internet operations since the last examination, and future plans to expand services. Obtaining this information early in the examination would enable the examiner to assess the institutional and examination risks and incorporate appropriate examination procedures.

The OTS should also consider incorporating into its handbook or EDP Controls Questionnaire specific procedures to identify and evaluate the strategic and operational risks and controls posed by on-line and Internet banking activities. In June 1997 the OTS alerted thrifts to the strategic and operational risks and concerns of retail on-line personal computer banking. However, the recently revised handbook still emphasizes the technology controls, rather than the strategic and operational concerns.

Once examiners begin to gather sufficient information and assess the risks of on-line and Internet activity, the OTS should consider developing additional procedures in each of the CAMELS sections of the Examination Handbook to ensure consistent and adequate coverage of on-line and Internet banking activities.

For example, the OTS could initially develop procedures to assess the operational impact of on-line and Internet banking services in each of the CAMELS examination areas. Such procedures would help examiners determine the impact of these activities on a thrift's operations and the need to adjust the examination procedures. The OTS could prioritize developing procedures for the operational risks from on-line and Internet banking services most commonly offered by thrifts.

Developmental Assignments Can Broaden Staff Expertise

In addition to training and guidance, the OTS could broaden its agency expertise over on-line and Internet banking through developmental assignments. Although both regions visited suffered from heavy workload, staff shortages, turnover and limited expertise, their approaches to these problems differed.

One region hired new employees with information systems experience and dedicated them solely to information systems examinations. The other region provided its safety and soundness examiners temporary rotating assignments on information systems examinations.

Both approaches can increase the regions' information systems resources. Hiring experienced people provides ready competency but at higher cost and does not allow the agency to push down its institutional knowledge into the organization. While developmental assignments may take longer to develop expertise, they broaden the agency's level of expertise, increase more examiners' exposure and comfort levels, and mitigate the effects of turnover.

Better Monitoring of Web Sites is Needed

The OTS needs to improve its Web site monitoring to ensure compliance with Federal banking regulations. While discussing the draft report, OTS managers informed the OIG that several initiatives were underway to accomplish better monitoring. Many thrift's Web sites in the two regions visited did not comply with Federal disclosure regulations. One fourth of the thrifts in two regions already had Web sites, and the number of sites and institutions offering Internet banking are expected to grow significantly in the near future. Better monitoring would also provide information on OTS' examination universe.

Better OTS Monitoring Can Improve Compliance with Disclosure Regulations

Neither region visited was monitoring thrifts' on-line banking services. One region was identifying its thrifts' Web sites and reviewing them quarterly for compliance with Federal disclosure regulations and laws. The region contacted the thrifts on

noncompliance issues and required corrections. The other region, however, was not identifying or monitoring its thrifts' Web sites.

At OTS' request, the OIG searched the Internet and found that 36 of the West Region's 108 thrifts had Web sites as of September 30, 1997, and another six planned to establish a Web site by early 1999. The Southeast Region reported that 57 of their 240 thrifts had a Web site as of January 1998. The majority of these sites offered marketing information such as locations, products and services rather than transactional banking services. The information available at those thrifts' Web sites is presented in Appendices 2 and 3.

Many of the West Region thrifts' Web sites were not being actively managed as an extension of the thrifts' products, services or marketing. Many of the sites were undated or had no indication of updating, one had an expired offer and one had an undated offer. Other sites were very lengthy with infrequent required disclosures. In total, two-thirds (24 of 36) of the West Region thrifts' Web sites contained apparent violations of Federal disclosure regulations and laws.

- Twenty-two (61%) of the 36 Web sites did not have recent dates or contained expired offers, violations of Regulation Z (Truth in Lending Act).
- Twenty-three (64%) Web sites did not clearly or conspicuously display the Equal Housing Lender logo or statement, and did not clearly or conspicuously display the Federal Deposit Insurance Corporation logo or statement, violations of the Fair Housing Act, FDIC regulations and Regulation CC (Expedited Funds Availability Act).
- Three (8%) Web sites did not disclose that non-deposit investment products were not FDIC insured or guaranteed, a violation of FDIC regulations.

The potential violations found in each Web site are presented in Appendix 4.

The OIG found several recent articles through the Internet that reported others are finding many violations of basic regulatory requirements in banking Web sites. In January 1998, a banking consultant randomly surveyed Web sites from around the country

and found violations of Regulation Z in 86 percent of the sites with consumer credit products. The articles reviewed by the OIG also provided guidance for institutions to improve their compliance.

Besides regulatory requirements, other potential compliance issue areas with on-line and Internet banking include the Bank Secrecy Act regarding electronic funds transfers, and thrifts that may do business with individuals or companies subject to the Office of Foreign Assets Control.

Compliance Examination Procedures Need to be Expanded

The OTS should consider improving its compliance examination procedures, monitoring and training for on-line and Internet banking. Specific guidance on monitoring thrifts' Web sites would ensure better compliance with Federal disclosure regulations. The OTS Regulatory Handbook on Compliance Activities was last updated in September 1997 and does not provide any guidance or direction on monitoring on-line or Internet banking or Web sites. OTS managers stated that many compliance issues are tied in to interagency actions, and they are participating in the interagency committees.

- The OTS should consider establishing a policy over monitoring thrifts' on-line and Internet banking activity and Web sites. The policy should include what is to be monitored; who is responsible for monitoring; when monitoring will occur; how monitoring will be performed and how the results are to be reported.
- Compliance examiners will need training to apply their expertise in consumer disclosure laws and other Federal banking regulations to the on-line and Internet banking environment.
- The OTS should consider enhancing its Compliance Preliminary Examination Response Kit to require thrift management to provide information such as the Web site address, on-line and Internet banking activity, products and services offered, number and types of accounts, deposits, assets, customer locations and concentrations. This current information would enable examiners to assess risk areas, plan

their examination coverage, and update the examination universe. In addition, the preliminary kit should request the thrift's management policy and practice over Web site development and maintenance, especially internal compliance oversight of Web site content. Any problems identified with on-line and Internet banking activity since the last examination and future plans in these areas should also be disclosed.

 The OTS should consider establishing specific examination procedures to ensure consistent and uniform monitoring of thrifts' on-line and Internet banking compliance with applicable Federal banking laws and regulations.
 Specifically, the OTS should consider incorporating procedures into the compliance handbook sections on Fair Lending; Consumer Affairs Laws and Regulations; Compliance Laws and Regulations; and the Community Reinvestment Act.

Matters for OTS Consideration

On-line and Internet banking services are becoming available throughout the financial services industry, with similar risks and rewards for all regulators. As such, all Federal regulators should continue to work together developing the training and guidance needed to effectively examine and supervise in this dynamic, growing area.

However, the OTS can take action to improve its examination and supervision over thrifts' on-line and Internet banking activities. Specifically, the OTS should consider:

- Establishing and maintaining a universe of thrifts offering online and Internet banking services to foster examination coverage, better plan and manage its workload, and identify staff development needs.
- Providing more and better staff training, guidance and opportunities to broaden the agency's level of expertise, increase its examiners' exposure and comfort levels, and mitigate the effects of turnover among staff with expertise.
- Monitoring the thrifts' Web sites on a regular basis to ensure compliance with Federal disclosure regulations and laws.

 Incorporating specific examination procedures into the safety and soundness and compliance examinations to ensure adequate and consistent coverage of on-line and Internet banking activities and the operational risks to the thrifts.

Management Comments

Formal management comments were not required because this consultative report does not contain recommendations subject to corrective action under Treasury Directive 40-01. However, OTS managers reviewed the draft report in late July and discussed the issues and suggestions presented. The OTS officials did not identify any specific material in the report that was sensitive or needed protection under the Freedom of Information Act.

The OTS managers commented that many initiatives consistent with the OIG's observations and suggestions were already underway to prepare the agency to keep pace with on-line and Internet banking developments. These include:

- The OTS is building a database of thrift Web sites and activities from ongoing Year 2000 work that will comprise OTS' universe of Internet banking. The OTS is also requiring thrifts to provide Web site addresses on their quarterly Thrift Financial Reports, and has proposed regulations requiring thrifts to notify their regional OTS office prior to initiating transactional Internet banking.
- OTS managers emphasized that the pilot course was designed to provide a foundation in emerging information technology within the banking industry. The intent was to provide exposure, and additional training in these areas will be developed. OTS currently plans to train safety and soundness examiners in local and wide area networks by early 1999.
- The OTS continues to actively recruit information systems examiners. Two have been hired this year, and offers are currently out to six others. Additional hiring will occur if qualified candidates are found.
- The OTS is developing and plans to implement agency-wide procedures for monitoring thrifts' Internet Web sites and

activities. Procedures are expected for compliance and safety and soundness issues. This process includes review of current monitoring procedures in the Southeast, Northeast and other regions to identify best practices.

- The OTS is revising Preliminary Examination Response Kit Number 005, which collects data on a thrift's information technology environment prior to an examination. This information is used to familiarize examiners with a thrift's use of information technology, identify attendant risks and plan their examinations.
- An OTS manager agreed that examiners need to be reminded to focus on traditional banking risks while considering electronic banking practices. The manager stated that electronic banking posed different delivery risks and speculated the technology involved might cloud the application of examination guidance for traditional banking risks.

OBJECTIVE, SCOPE AND METHODOLOGY

The overall objective of this consulting engagement was to assist the OTS in improving their examination of on-line and Internet banking activities. In 1997, OTS' Director asked the OIG's assistance in evaluating examination policies and practices in view of the expected technology changes in the financial services industry. The OIG identified five areas for review, and OTS management selected on-line and Internet banking.

This consulting engagement was conducted in accordance with the AICPA's Statement on Standards for Consulting Services.

The OIG conducted its field work from August 1997 to May 1998. Field work was conducted at OTS headquarters in Washington, DC; West Region offices in San Francisco and Irvine, California; and the Southeast Region in Atlanta, Georgia. In December 1997 the OIG attended the OTS' pilot course on Emerging Information Technology in Irving, Texas.

The OIG interviewed OTS headquarters officials in three examination areas (Safety and Soundness, Information Systems, and Compliance), and the Chief Counsel's Office. At the two regions, the OIG interviewed Assistant Regional Directors, managers, review examiners, examiners in charge, and examiners. At each OTS location visited, the OIG requested the universe of thrifts with on-line and Internet banking services and their products and services. The OIG discussed with headquarters and regional staff the policies and procedures for identifying these activities, keeping this information accurate, and assessing and covering these risks in examinations. The OIG selected and reviewed the reports and supporting work papers for 38 recently completed examinations (30 in the West Region and 8 in the Southeast Region) to determine the risk assessments and examination coverage provided over on-line and Internet banking.

At OTS' request, the OIG searched the Internet to identify those thrifts in the West Region which had or planned to have a Web site on the Internet. An interim report on those Web sites (OIG-98-036) was provided to the OTS in January 1998. The OIG obtained a Southeast Region listing of their thrifts with Internet activity, and prepared the profile of Internet products and services offered by thrifts in the West and Southeast Regions at Appendices 2 and 3. The OIG also reviewed the West Region thrifts' Web sites for compliance issues.

The OIG met with three other Federal banking regulators (OCC, FRB and FDIC) and discussed their efforts and plans to address on-line and Internet banking risks in their examinations. The OIG also interviewed officials at a large bank that is perceived as a global leader in offering on-line and Internet banking services to its customers, two

OBJECTIVE, SCOPE AND METHODOLOGY

thrifts, and three banking associations to determine industry perspectives as to on-line and Internet banking and the Federal regulators' readiness to address the changing banking environment.

The OIG presented the OTS Director the results of this consulting engagement in May 1998. The Director requested the OIG also provide suggestions how on-line and Internet banking coverage could be incorporated into OTS' examination procedures. Accordingly, suggestions are included in this report for expanding safety and soundness and compliance examination procedures to address on-line and Internet banking activities.

INFORMATION ON THE INTERNET BY WEST REGION THRIFTS AS OF SEPTEMBER 30, 1997

				Bran				Non-Depo		Home			
	<u>Institution</u>	<u>E-mail</u>		Location	<u>ons</u>	<u>Servi</u>	ces	Investmen	<u>ıts</u>	<u>Bankiı</u>	<u>ıg</u>	Other	
1	Alaska Federal Savings			Yes								Yes	
2	American Savings Bank HI	• •		Yes		* 7		**		• •		T 7	
3	Bank of America FSB	Yes		Yes		Yes		Yes		Yes		Yes	
4	Bay View Federal Bank	Yes		Yes		Yes		Yes				Yes	
5	California Federal Bank	Yes		Yes									
6	Cascade Bank	Yes		Yes		Yes		Yes					
7	Citibank Federal Savings Bk.	Yes		Yes		Yes		Yes		Yes		Yes	
8	Coast Federal Bank	Yes		Yes		Yes						Yes	
9	Downey Savings	Yes		Yes		Yes				Yes			
10	Eureka Bank	Yes		Yes								Yes	
11	Fidelity Federal Bank	Yes				Yes						Yes	
12	First Bank of Beverly Hills	Yes				Yes						Yes	
13	First Federal S&L of Port Angeles	Yes		Yes		Yes				Yes		Yes	
14	First Federal Bank (ID)			Yes		Yes						Yes	
15	First FS & LA of Twin Falls	Yes				Yes							
16	First Fed. S&L of San Gabriel Valley	Yes		Yes		Yes						Yes	
17	First FS & LA of San Rafael	Yes				Yes						Yes	
18	First Interstate Bank of MT	Yes		Yes		Yes						Yes	
19	Flagship Bank FSB	Yes		Yes		Yes						Yes	
20	Glacier Bank	Yes		Yes		Yes						Yes	
21	Glendale Federal	Yes		Yes		Yes				Yes		Yes	
22	Great Western Bank	Yes		Yes								Yes	
23	Hawthorne Savings FSB	Yes		Yes		Yes							
24	Home S&L of Nampa	Yes		Yes		Yes							
25	Home Savings of America		Yes				Yes	Y	'es		Yes		Yes
26	La Jolla Bank	Yes		Yes		Yes						Yes	
27	Life Savings Bank	Yes				Yes						Yes	
28	Los Padres Savings											Yes	
29	Mountain West Bank	Yes				Yes						Yes	
30	Palomar Savings and Loan			Yes									
31	Pomona First Federal	Yes		Yes		Yes							
32	Riverview Savings Bank	Yes		Yes		Yes						Yes	
33	Sentinel Community Bank		Yes		Yes		Yes				Yes		Yes
34	Sterling Savings Bank		2 00		2 00		200				2 00	Yes	200
35	Universal Bank	Yes				Yes						Yes	
36	Western Financial Bank, FSB	Yes				100						Yes	
00	Trestern I munetur Dunk, 100	105		_		_		_		_		100	

Totals <u>30</u> <u>25</u> <u>27</u> <u>5</u> <u>7</u> <u>27</u>

INFORMATION ON THE INTERNET BY SOUTHEAST REGION THRIFTS AS OF JANUARY 12, 1998

			Branch	Products &	Non-Deposit	Home	
_	Institution	<u>E-mail</u>	Locations	Services	Investments	Banking	Other
	American FSB	Yes	Yes	Yes			Yes
2 A	Atlanta Internet Bank	Yes		Yes		Yes	Yes
3 A	Atlantic Savings Bank, FSB						
4 I	Baltimore County Savings Bank, FSB	Yes	Yes	Yes			Yes
5 I	BankAtlantic, FSB	Yes	Yes	Yes		Yes	Yes
	Bay-Vanguard FSB	Yes	Yes	Yes		Yes	Yes
7 I	Beneficial Savings Bank, FSB		Yes				Yes
8 I	Black Diamond Savings, FSB	Yes	Yes	Yes			Yes
9 I	Bradford FSB	Yes	Yes	Yes			Yes
10	Capital One, FSB			Yes			Yes
11 (Charter FS & LA	Yes		Yes			Yes
	Chesapeake FS & LA	Yes	Yes	Yes			Yes
13	Chevy Chase Bank, FSB	Yes	Yes	Yes		Yes	Yes
14 (Coastal FSB	Yes	Yes	Yes			Yes
15 (Community FSB	Yes	Yes	Yes			Yes
16	Community Savings, FA	Yes	Yes	Yes			Yes
17	Crown Bank, FSB	Yes	Yes	Yes			Yes
18 I	Douglas Federal Bank, FSB	Yes	Yes	Yes			
19 I	Eastern Savings Bank, FSB	Yes		Yes			Yes
	Eastern American Bank, FSB	Yes		Yes			Yes
21 I	Enterprise FSB	Yes	Yes	Yes			Yes
	Fidelity Federal S B of FL	Yes	Yes	Yes		Yes	Yes
23 I	Fidelity Federal S B	Yes	Yes	Yes			Yes
24 I	First Bank of Florida	Yes	Yes	Yes			Yes
25 I	First Federal Bank, FSB	Yes	Yes	Yes			Yes
26 I	First FS&LA of La Grange	Yes	Yes	Yes			Yes
27 I	First FS&LA of Lake County	Yes	Yes	Yes		Yes	Yes
28 I	First FS&LA of Putnam County	Yes	Yes	Yes		Yes	Yes
29 I	First FS&LA	Yes		Yes		Yes	Yes
30 I	First FSB of Florida	Yes	Yes	Yes			Yes
31 I	Fraternity FS&LA						
32 I	Fredricksburg FS&LA	Yes	Yes	Yes			Yes

INFORMATION ON THE INTERNET BY SOUTHEAST REGION THRIFTS AS OF JANUARY 12, 1998

			Branch	Products &	Non-Deposit	Home	
	Institution	<u>E-mail</u>	Locations	Services	Investments	Banking	<u>Other</u>
33	Harbor FSB	Yes	Yes	Yes		Yes	Yes
34	Home FSB	Yes	Yes	Yes			Yes
35	Homewood FSB	Yes		Yes			Yes
36	Independence FSB	Yes		Yes			Yes
37	JP Morgan Florida, FSB	Yes	Yes				
38	Leeds FSB	Yes		Yes			Yes
39	Madison & Bradford FS&LA	Yes	Yes	Yes			Yes
40	Maryland FS&LA	Yes	Yes	Yes	Yes	Yes	Yes
41	Norfield FSB	Yes	Yes	Yes			Yes
42	Peoples First Financial						
43	Piedmont FS & LA						
44	Palmetto FSB	Yes	Yes	Yes			Yes
45	Presidential Savings Bank, FSB	Yes	Yes	Yes	Yes	Yes	Yes
46	Raymond James Bank, FSB	Yes		Yes	Yes		Yes
47	Security First Network Bank	Yes		Yes	Yes	Yes	Yes
48	Severn Savings Bank, FSB		Yes	Yes			Yes
49	Shore FSB	Yes	Yes	Yes			Yes
50	Slavie FS & LA	Yes	Yes	Yes			Yes
51	Suburban FSB	Yes	Yes	Yes			Yes
52	Susquehanna FSB		Yes				Yes
53	TeleBank		Yes		Yes	Yes	
54	The Hometown Bank		Yes	Yes			Yes
55	Tucker Federal Bank	Yes		Yes	Yes		Yes
56	United FSB	Yes	Yes	Yes			Yes
57	Wyman Park FS&LA	Yes	Yes	Yes	_	_	Yes
	Totals	<u>47</u>	<u>41</u>	<u>49</u>	<u>6</u>	<u>13</u>	<u>5</u>

SOURCE: OTS Southeast Region

POTENTIAL VIOLATIONS OF FEDERAL DISCLOSURE REGULATIONS ON WEB SITES OF WEST REGION THRIFTS AS OF FEBRUARY 1998

Potential Regulation Violations

			1 otential regulation violations						
			Fair Housing Act	FDIC &					
_1	Institution code	Reg. Z (1)	& Reg. CC (2)	Reg. CC (3)	FDIC (4)	Total			
1	001		X	X		2			
2	002	X	X	X		3			
3	003	X	X	X	X	4			
4	004	X	X	X		3			
5	005	X	X	X	X	4			
6	006	X	X	X		3			
7	007	X	X	X		3			
8	008	X	X	X		3			
9	009	X	X	X		3			
10	010	X	X	X		3			
11	011	X	X	X		3			
12	012	X	X	X		3			
13	013	X	X	X		3			
14	014	X	X	X	X	4			
15	015	X	X	X		3			
16	016	X	X	X		3			
17	017	X	X	X		3			
18	018	X	X	X		3			
19	019	X	X	X		3			
20	020	X	X	X		3			
21	021	X	X	X		3			
22	022	X				1			
23	023		X	X		2			
24	024	X	X	X		3			
	Totals	22	23	23	3	71			

Notes:

- 1 Web site did not provide current information or offer(s) as required by Regulation Z (Truth in Lending Act).
- 2 Web site did not clearly and conspicuously display Equal Housing Lender logo or statement as required by the Fair Housing Act and Regulation CC (Expedited Funds Availability Act).
- 3 Web site did not clearly and conspicuously display the FDIC logo or statement as required by FDIC and Regulation CC (Expedited Funds Availability Act).
- 4 Web site did not clearly disclose that non-deposit products are not insured by the FDIC or guaranteed by the government as required by FDIC.

SOURCE: Internet Web sites of West Region thrifts

Western Region

Benny W. Lee, Regional Inspector General for Audit

Kenneth F. Wicklander, Audit Manager

Anthony J. Putzulu, Auditor-In-Charge

Gale H. Dwyer, Auditor

U.S. Department of the Treasury

Office of the Assistant Secretary of the Treasury for Financial Institutions

Office of the Assistant Secretary of the Treasury for Management / Chief Financial Officer

Office of Organizational Improvement, Departmental Offices

Office of Strategic Planning, Departmental Offices

Office of Accounting and Internal Control, Departmental Offices

Office of Budget, Financial Management Division, Departmental Offices

Office of Thrift Supervision

Director

Executive Director, Supervision

Office of Management and Budget

OIG Budget Examiner